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PATENT APPLICATION

THE UNITED STATES PATENT AND TRADEMARK OFFICE

1655  
Bad Seq  
#23/f  
Mida  
11/30/01

In re application of

Takahiko, ISHIGURO, et al.

Appln. No.: 09/345,761

Confirmation No.: 1618

Group Art Unit: 1655

Filed: July 1, 1999

Examiner: WILDER, C

For: METHOD OF ASSAY OF TARGET NUCLEIC ACID

**SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. § 1.111**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

This Supplemental Amendment is in response to the telephone conversation with Examiner Wilder on November 2, 2001. Please amend the above-identified application as follows:

**IN THE SPECIFICATION:**

**Please amend the specification as follows:**

**Page 36, lines 12-13, delete in their entirety, and insert therefor**

-- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 36, line 15, delete in its entirety, and insert therefor**

-- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 37, lines 11-12, delete in their entirety, and insert therefor**

33 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA A- (bases 11 to 300 in HCV  
cDNA) 3' (nucleotides 1-25 of SEQ ID NO:6) --.

**Page 37, line 27, delete in its entirety, and insert therefor**

34 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 38, lines 7-8, delete in their entirety and insert therefor**

35 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA A- (bases 11 to 300 in HCV  
cDNA) 3' (nucleotides 1-25 of SEQ ID NO:6) --.

**Page 38, lines 20-21, delete in their entirety, and insert therefor**

36 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 39, line 21, delete in its entirety, and insert therefor**

37 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 40, lines 1-2, delete in their entirety, and insert therefor**

38 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA A- (bases 11 to 300 in HCV  
cDNA) 3' (nucleotides 1-25 of SEQ ID NO:6) --.

**Page 40, lines 14-15, delete in their entirety, and insert therefor**

39 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 41, line 19, delete in its entirety, and insert therefor**

310 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 41, lines 21-22, delete in their entirety, and insert therefor**

*g11* -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 41, line 27, delete in its entirety.**

**Page 42, line 1, delete in its entirety, and insert therefor**

*g12* -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**Page 43, line 15, delete in its entirety, and insert therefor**

*g13* -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 43, lines 22-23, delete in their entirety, and insert therefor**

*g14* -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA A- (bases 11 to 300 in HCV  
cDNA) 3' (nucleotides 1-25 of SEQ ID NO:6) --.

**Page 44, lines 8-9, delete in their entirety, and insert therefor**

*g15* -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 45, line 10, delete in its entirety, and insert therefor**

*g16* -- (sequence) 5' GTC GCC CCC AA 3' (SEQ ID NO:3) --.

**Page 45, lines 15-19, delete in their entirety, and insert therefor**

317 -- (sequence) 5' (vector sequence) GGG AAA GCU UGC AUG CCU GCA GGU CGA CUC  
UAG AGG AUC CCC GGG UAC CGA GCU CGA AUU CC (sequence from HCV) U UGG  
GGG CGA CAC UCC ACC AUA GAU CAC UCC CCU GUG AGG AAC UAC UGU CUU  
CAC GCA GAA AGC GUC UAG C 3' (SEQ ID NO:4) --.

**Page 46, line 19, delete in its entirety, and insert therefor**

318 -- (sequence) 5' GTC GCC CCC AA 3' (SEQ ID NO:3) --.

**Page 48, lines 13-14, delete in their entirety, and insert therefor**

319 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 48, line 16, delete in its entirety, and insert therefor**

320 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 48, lines 21-22, delete in their entirety, and insert therefor**

321 -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**Page 50, lines 2-3, delete in their entirety, and insert therefor**

322 -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**Page 50, lines 7-8, delete in their entirety, and insert therefor**

323 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA A- (bases 11 to 300 in HCV  
cDNA)-3' (nucleotides 1-25 of SEQ ID NO:6) --.

Page 51, line 27, delete in its entirety.

Page 52, line 1, delete in its entirety, and insert therefor

324 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

Page 52, line 3, delete in its entirety, and insert therefor

325 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

Page 52, lines 7-8, delete in their entirety, and insert therefor

326 -- (sequence) 5' GAA UAC AA- (bases from 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of  
SEQ ID NO:7) --.

Page 54, lines 13-14, delete in their entirety, and insert therefor

327 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

Page 54, line 16, delete in its entirety, and insert therefor

328 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

Page 54, lines 21-22, delete in their entirety, and insert therefor

329 -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

Page 56, line 1, delete in its entirety, and insert therefor

330 -- (sequence) 5' CTC GC\*G GGG GCT G 3' (SEQ ID NO:5) --.

**Page 58, lines 12-13, delete in their entirety, and insert therefor**

*f31* -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 58, line 15, delete in its entirety, and insert therefor**

*f32* -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 58, lines 21-22, delete in their entirety, and insert therefor**

*f33* -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**Page 61, lines 2-3, delete in their entirety, and insert therefor**

*f34* -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 61, line 5, delete in its entirety, and insert therefor**

*f35* -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 61, lines 11-12, delete in their entirety, and insert therefor**

*f36* -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**Page 63, lines 6-7, delete in their entirety, and insert therefor**

*f37* -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 63, line 9, delete in its entirety, and insert therefor**

*f38* -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 63, lines 15-16, delete in their entirety, and insert therefor**

939 -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**Page 65, lines 17-18, delete in their entirety, and insert therefor**

940 -- (sequence) 5' ATT TAG GTG ACA CTA TAG AAT ACA ACA CTC CAC CAT AGA  
TCA CTC CCC TG 3' (SEQ ID NO:1) --.

**Page 65, line 20, delete in its entirety, and insert therefor**

941 -- (sequence) 5' ACT CGC AAG CAC CCT ATC A 3' (SEQ ID NO:2) --.

**Page 65, line 27, delete in its entirety.**

**Page 66, line 1, delete in its entirety, and insert therefor**

942 -- (sequence) 5' GAA UAC AA- (bases 11 to 300 in HCV RNA) 3' (nucleotides 1-8 of SEQ  
ID NO:7) --.

**REMARKS**

Claims 30, 32-34, 36-48 and 50 are all the claims pending in the application.

**I. Specification**

The specification has been amended to insert sequence identifiers in each location that a nucleic acid or amino acid sequence, meeting the criteria of 37 C.F.R. §1.821(d), appears.

The specification has also been amended to correct an obvious error in a sequence recited in the specification. Specifically, the sequence recorded at page 45, line 10, and at page 46, line 19, was erroneous. It is clear that the correct sequence is 5' GTC GCC CCC AA 3' from the sequence of the 133-mer RNA at page 45, lines 15-19. Because the underlined 11 base sequence U UGG GGG CGA A in the 133-mer RNA sequence is said to be complementary to the 11-mer DNA (page 45, lines 20-21), the correct sequence for the 11-mer oligo DNA, whose sequence is erroneously disclosed page 45, line 10, and at page 46, line 19, is obviously GTC GCC CCC AA. In this regard, although the 11-mer oligo DNA is referred to merely as "first single-stranded oligonucleic acid" at page 46, line 17, it is obvious that the oligonucleic acid is DNA because it includes thymine.

**II. Sequence Listing**

A revised Sequence Listing is being submitted concurrently to correct the obvious error in SEQ ID NO: 3 (recorded in the specification at page 45, line 10, and at page 46, line 19).

Both a paper copy and a computer readable form copy of the Listing is being submitted, along with a Statement that the contents of the two forms are identical.



Applicants assert that the only change to the Sequence Listing is the correction of SEQ ID NO: 3.

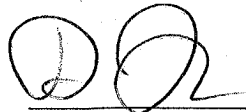
As explained above, the correction is fully supported by the specification and does not introduce any new matter.

### **III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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Date: November 26, 2001